# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

#### CLEANUP AND ABATEMENT ORDER No. 2000-255

# CHUNG KWAN HSU AND HUI MEI HSU (OWNERS/OPERATORS) BUDGET TRADE & GAS 510 WEST FIFTH AVENUE, ESCONDIDO SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter RWQCB) finds that:

- 1. Budget Trade & Gas is a retail gas station/mini-mart owned and operated by Chung Kwan Hsu and Hui Mei Hsu (hereinafter Mr. & Mrs. Hsu), located at 510 West Fifth Avenue in Escondido California. The site lies within the Escondido Hydrographic Subarea of the Carlsbad Hydrographic Unit. The site is currently in active use as Budget Trade & Gas, a retail gas station/mini-mart.
- 2. Liquid phase hydrocarbons (free product) were discovered by the San Diego County Department of Environmental Health (DEH) during a routine monitoring well inspection. DEH issued an Official Notice, dated October 26, 1989, to Mr. & Mrs. Hsu that an Unauthorized Release had occurred, and for Mr. Hsu to begin site assessment and mitigation measures. DEH became the local oversight agency to direct site assessment and mitigation,
- 3. On December 22, 1989, four underground storage tanks (UST's), 3 gasoline and 1 diesel, were removed from the Budget Trade & Gas facility. The soil and ground water beneath the former UST's were contaminated with petroleum hydrocarbons. Four new UST's were installed in February 1990.
- 4. On April 25, 1990, the RWQCB, under authority of Section 13267 of the California Water Code (CWC), directed Mr. & Mrs. Hsu to submit a report that completely delineated the extent of petroleum hydrocarbon contamination from the site; a workplan for remediation of soil and ground water; removal of free product from the ground water; and monthly reports.
- 5. On October 1, 1990, the RWQCB issued Cleanup and Abatement Order (CAO) No. 90-59 due to noncompliance with the April 25, 1990 Section 13267 letter. CAO No. 90-59 directed the discharger to:
  - a) Immobilize and remove all free product from the ground water underlying the site and other effected sites.
  - b) Protect against the degradation of the ground and surface water of the Escondido Hydrographic Subarea.

- c) Clean up the petroleum hydrocarbon contaminated soil and ground water to the satisfaction of the Regional Board Executive Officer.
- 6. From March 1990 to December 1994 the following was done at the site:
  - a) Eight ground water monitoring wells were installed
  - b) Free product was removed from the ground water.
  - c) Ground water monitoring was performed.
  - d) Two site assessment reports were submitted.
  - e) Free product removal and ground water monitoring reports were submitted.

No further reports were submitted after December 1994.

- 7. On December 7, 1993, Mr. & Mrs. Hsu received a Letter of Commitment for the State Water Resources Control Board (SWRCB) UST Cleanup Fund for \$270,000 for reimbursement of remedial costs. A total of \$159,899 was reimbursed to Mr. & Mrs. Hsu. On November 17, 1997, the SWRCB notified Mr. & Mrs. Hsu that the UST Cleanup Fund had withdrawn the remainder their claim due to noncompliance with the local agency's directives and noncompliance with the terms and conditions of the SWRCB Letter of Commitment.
- 8. On May 9, 1996, the RWQCB rescinded CAO No. 90-59 because it was no longer cost effective to maintain CAO's for cases where the local oversight program (LOP), DEH, had oversight of investigation and cleanup, thereby reducing duplicative efforts between local and state agencies.
- 9. On May 17, 1999, DEH requested RWQCB assistance in obtaining compliance from Mr. & Mrs. Hsu because there had been no activity on the site since November 1994 despite frequent requests from DEH requiring action.
- 10. On June 9, 1999, the RWQCB issued a letter, pursuant to CWC Section 13267, that requested a workplan, due August 1, 1999 for full delineation, vertically and horizontally, on-site and off-site, of ground water contamination; and a corrective action plan, due September 1, 1999 for remediation of ground water contamination.
- 11. On January 12, 2000, the RWQCB issued Administrative Civil Liability (ACL) Complaint No. 2000-23 for failure to submit a workplan and corrective action plan as required in the June 1999 CWC 13267 letter.
- 12. On February 9, 2000, the RWQCB adopted ACL No. 2000-23, which imposed upon Mr. & Mrs. Hsu, Budget Trade & Gas, San Diego County, a civil liability assessment of \$35,680 for failure to submit a workplan and corrective action plan as required by RWQCB pursuant to CWC 13267. The amount of \$35,680 was suspended provided that both of the following conditions were met:
  - a) Submittal of a workplan for full delineation, vertically and horizontally, on-site and off-site, of ground water pollution from the Budget Trade & Gas facility, due March 10, 2000.

b) Submittal of a corrective action plan for remediation of ground water pollution from the Budget Trade & Gas facility, due August 7, 2000.

If either of the conditions were not satisfied, the full amount of the civil liability would become immediately and automatically due on the date of failure.

- 13. On March 8, 2000, Mr. & Mrs. Hsu submitted a workplan for ground water monitoring and additional subsurface investigation.
- 14. On July 26, 2000, Mr. & Mrs. Hsu submitted a report titled "Semi-Annual Groundwater Monitoring and Sampling", dated July 20, 2000. Hydrocarbon sheen or measurable free product was observed in two monitoring wells, and ground water was sampled and analyzed from eleven monitoring wells. The maximum concentration of ground water contaminants from this sampling of the monitoring wells are as follows:

Petroleum Constituents	Maximum Concentration (ug/L)
Total Petroleum Hydrocarbon	9,900
Benzene	1,000
Toluene	1,100
Ethylbenzene	210
Total Xylenes	1,400
Methyl Tertiary Butyl Ether	8,600

- 15. On July 27, 2000, the SWRCB UST Cleanup Fund issued a letter of pre-approval of corrective action costs to Mr. Hsu, for \$37,733.
- 16. On August 9, 2000, the RWQCB informed Mr. & Mrs. Hsu that they had failed to comply with the conditions of the suspension of ACL Order No. 2000-23. An assessment of \$35,680 was payable immediately, no later than 30 days from the date of this letter.
- 17. On September 12, 2000, the RWQCB informed Mr. & Mrs. Hsu that since the civil liability assessment of \$35,680 had not been paid to the State Water Resources Control Board by September 9, 2000, that the RWQCB would seek a judgement for the amount of the civil liability.
- 18. Recent observations (October 2000) by RWQCB staff have shown that there is a potential of a current unauthorized release at Budget Trade & Gas. Free product was on the surface adjacent to the dispenser islands, and absorbent material was spread around dispensers and on the free product on the surface.
- 19. The Water Quality Control Plan for the San Diego Basin (9) (Basin Plan) was adopted by the RWQCB on September 8, 1994; approved by the SWRCB on December 13, 1994; and approved by the Office of Administrative Law on April 26, 1995. The Basin Plan establishes water quality objectives for the San Diego Basin.

- 20. The site is located within an area of the Escondido Creek Watershed in the Basin Plan (1994). The following designated beneficial uses have been established by the Basin Plan for surface water resources of the Escondido Creek Hydrologic Subarea (HSA 4.62):
  - a) Municipal and domestic supply (MUN)
  - b) Agricultural supply (AGR)
  - c) Industrial service supply (IND)
  - d) Potential industrial process supply (PROC)
  - e) Water contact recreation (REC1)
  - f) Non-contact water recreation (REC2)
  - g) Warm freshwater habitat (WARM)
  - h) Cold freshwater habitat (COLD)
  - i) Wildlife habitat (WILD)
- 21. The following designated beneficial uses have been established by the Basin Plan for ground water resources of the Escondido Hydrologic Subarea (HSA 4.62):
  - a) Municipal and domestic supply (MUN)
  - b) Agricultural supply (AGR)
  - c) Industrial service supply (IND)
- 22. The past, current and possible future discharge(s) of wastes at the site have created a condition of pollution, as defined in the CWC Section 13050, in the ground water based upon Maximum Contaminant Levels (MCL's) established in the California Code of Regulations, Title 22 (22 CCR) for human consumption. The following MCL's are established for primary drinking water constituents pursuant to CCR Title 22, Division 4, Chapter 15, Article 5.5, Section 64444 and federal requirements:

Constituents	Maximum Contaminant Level (ug/L)
Benzene	1
Toluene	150
Ethylbenzene	700
Total Xylenes	1750
Methyl Tertiary Buty	l Ether 13

- 23. The ground water results (Finding 14 above) indicate that the discharge of wastes at the site has created a condition of pollution in violation of CWC Section 13304.
- 24. Pursuant to SWRCB Resolution No. 92-49, the RWQCB shall require the discharger(s) to conduct investigation, cleanup and abatement in a progressive sequence comprised of the following steps:
  - a) preliminary site assessment;
  - b) soil and water investigation;

- c) proposal and selection of cleanup and abatement action (to evaluate feasible and effective cleanup and abatement actions);
- d) implementation of cleanup and abatement action; and
- e) monitoring to confirm the short and long-term effectiveness of cleanup and abatement.
- 25. Pursuant to SWRCB Resolution No. 68-16, the RWQCB is required to ensure that dischargers are required to cleanup and abate the effects of discharges in a manner that promotes the attainment of background water quality; or the highest water quality which is reasonable if background levels can not be restored, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible. Any alternative levels less stringent than background shall:
  - a) be consistent with the maximum benefit to the people of the state;
  - b) not unreasonable affect the present and anticipated beneficial use of such water; and
  - c) not result in water quality less than that prescribed in the Water Quality Control Plans and Policies adopted by the State and Regional Water Boards.
- 26. SWRCB Resolution No. 92-49, governing cleanup of waste discharges to land, (CCR, Title 23, Division 3, Chapter 15) requires that cleanup and abatement actions intended to contain waste at the place of release shall implement the applicable provisions of that chapter, to the extent feasible (CCR, Title 23, Division 3, Chapter 15, Section 2511(d)). Article 5 of that chapter will be considered in establishing cleanup levels (CCR, Title 23, Chapter 15, Section 2550.4) and undertaking corrective actions where discharges of waste are subject to CWC Section 13304.
- 27. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resource Code, Section 21000 et. seq.) in accordance with Section 15321, Chapter 3, Title 14, CCR.

IT IS HEREBY ORDERED, that pursuant to Section 13304 of the California Water Code, the entities/persons identified in Finding No. 1 of this Order (hereinafter the "discharger(s)") shall comply with the following:

#### I. IMMEDIATE ACTION

a) The dischargers shall take immediate action to cease any potential current discharge of waste to soil and ground water. This shall be accomplished by assuring that the equipment to store and dispense petroleum hydrocarbons is not leaking. The dischargers shall submit a report to this office no later than January 1,2001 that documents current, appropriate testing of the equipment to store and dispense of fuel to demonstrate that there are no leaks of petroleum hydrocarbon into the soil and ground water.

b) Immobilize and remove all free product from the ground water underlying the site and other effected sites. All monitoring wells containing free product shall be inspected weekly, product thickness recorded, and product removed. Report free product removal amounts monthly to the RWQCB Executive Officer starting repreed January 1, 2001.

#### II. SITE INVESTIGATION REPORT

- a) Pursuant to the requirements of CCR Title 23, Division 3, Chapter 16, Article 11, Sections 2723 through 2725, the dischargers shall submit a report to this office no later than January 15, 2001, a site investigation workplan that describes methods to fully delineate soil and ground water petroleum contamination, vertically and horizontally, on-site and off-site.
- b) The dischargers shall implement the site investigation workplan within 15 days of approval by the RWQCB Executive Officer.
- c) The dischargers shall submit a site investigation report within 60 days of the start of site investigation work.

#### III. CORRECTIVE ACTION PLAN

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- a) Pursuant to the requirements of CCR Title 23, Division 3, Chapter 16, Article 5, Section 2655 and Article 11, Section 2722(b), the dischargers shall submit a Corrective Action Plan (CAP) to the RWQCB by April 15, 2001. The CAP must contain all the elements specified in Article 11, Section 2725 including:
  - i) an assessment of impacts in accordance with Article 11, Section 2725 (e),
  - ii) a feasibility study to evaluate site remediation and mitigation alternatives in accordance with Article 11, Section 2725 (f),
  - iii) cleanup levels in accordance with the requirements of Article 11, Section 2725(g) and which comply with the requirements listed in Article 11, Section 2721(b), SWRCB Resolution No. 92-49, and Finding 21 of this Order,
  - iv) proposed method(s) and schedule for the monitoring and reporting of progress of remediation at the site. These results should be used by the dischargers to evaluate the effectiveness of the approved corrective action alternative implemented by the dischargers to remediate the soil and ground water contamination from the unauthorized release at the site. The results and the technical evaluation must be reported to the RWQCB Executive Officer for review and comment.
- b) The feasibility study described in **Directive No. III.a.ii** of this Order shall contain an evaluation of alternatives for cleanup of soil and ground water. The evaluation shall be consistent with the requirements of CCR Title 23, Division 3, Chapter 16, Section 2725(f) and include the following elements:

i) An evaluation of the effectiveness, feasibility, and cost of at least two alternatives to attain the following primary MCL water quality levels:

Constituents	<u>Maximum</u>	Contaminant Le	vel (ug/L)
Benzene		/ 1	
Toluene		150	
Ethylbenzene		700	
Total Xylenes		1750	
Methyl Tertiary Butyl	Ether	13	

- ii) An evaluation of methods to control the spread of the free product and the dissolved contaminant plume off the property occupied by Budget Trade & Gas
- iii) A comprehensive description of the cleanup and abatement activities associated with each recommended alternative.
- iv) A proposed time schedule, including interim milestone dates, for completion of each recommended alternative.
- c) The discharger shall remove and/or treat all contaminated soils to a level that will not cause site related contaminants to leach into the ground water at concentrations which exceed the water quality objectives.

#### IV. VERIFICATION SAMPLING AND MONITORING

- a) The dischargers shall prepare a proposed workplan for verification sampling and monitoring in compliance with Section 2727 of Article 11. The workplan must be submitted to the RWQCB for review and approval within 60 days of full implementation of the CAP. The discharger shall modify the proposed workplan as required by the RWQCB Executive Officer. Upon completion of corrective action, the discharger shall perform soil sampling and ground water monitoring which is necessary to verify:
  - i) the effectiveness of the selected remedial alternative(s) identified in the Corrective Action Plan and/or,
  - ii) other interim remedial action(s) implemented at the site.
- b) The results from the verification and monitoring must be submitted to the RWQCB Executive Officer within 90 days of approval of the verification and monitoring workplan by the RWQCB. An alternative deadline may be proposed to the RWQCB Executive Officer in the event that long-term monitoring is required at the site.
- c) The dischargers shall manage all contaminated ground water and/or soil generated as a result of any corrective action work at this site in accordance with all applicable local, state and federal regulations and requirements.

- d) Based upon review of the Corrective Action Plan and/or verification sampling and monitoring results, the RWQCB Executive Officer may amend this CAO to identify the target ground water and soil cleanup levels to be attained at the site. If this Order is not amended by the RWQCB Executive Officer, then the water quality protection standards (MCL's) identified in Finding 21 of this Order will be adopted as the maximum ground water contaminant concentration levels allowed for the site.
- e) The dischargers shall implement the Corrective Action Plan in accordance with a time schedule proposed by the dischargers and approved by the RWQCB Executive Officer. The dischargers shall modify the proposed Corrective Action Plan as required the RWQCB Executive Officer.

## V. GROUND WATER MONITORING

- a) The dischargers shall implement ground water monitoring at the site. The dischargers shall submit monitoring reports to this office on a quarterly basis until, in the opinion of the Regional Board Executive Officer, the site has been adequately cleaned up. The first quarterly ground water monitoring report is due January 30, 2001.
- b) All monitoring wells not containing free product shall be sampled and analyzed for Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Lead (PB) and Methyl Tertiary Butyl Ether (MTBE) using the specified EPA test methods:

Constituent	EPA Test Method
TPH	TPH-DHS or EPA Method 8015
BTEX	EPA 8020, 8021, 8240 or 8260b
MTBE	EPA 8260b
Total Lead	EPA 6010, 7420, or 7421

- c) All monitoring wells containing free product shall have the thickness observed in the monitoring well recorded and reported as part of the monthly free product reporting.
- d) Prior to sampling the ground water monitoring wells, the water standing in the casing shall be pumped using an appropriate purging methodology which will minimize aeration of the water samples and the destruction of volatile contaminants. The volume of water to be purged shall be either:
  - i) at least three to five well volumes (including the gravel pack volume),
  - ii) until the water chemistry stabilizes with respect to pH and specific conductance.

Water chemistry can be considered stable when in-line specific conductance and pH readings are within 10% and 0.1 pH units respectively over two successive well bore volumes and volumes of water purged from each well, if purging is performed using option i) (three to five well bore volumes) above.

After purging, a representative water sample should be collected when the water level reaches 80% of the static water level. If 80% recovery of the initial water level exceeds two hours, a sample should be collected as soon as the water level is sufficient to recover a representative sample.

#### VI. GROUND WATER MONITORING REPORTING

- a) The Ground Water Monitoring Reports prepared to satisfy requirements of **Directive V** of this Order shall include and be submitted in accordance with the following:
  - i) Provide a narrative description of the current site conditions and a brief summary of known site hydrogeologic conditions.
  - ii) Provide a tabulation of historical ground water analytical data collected from the site. Provide technical interpretations of the ground water data, conclusions and recommendations for future action with each report.
  - iii) Provide a narrative description of the method(s) used to make the required measurements. For each well, tabulate data on depth and elevation to ground water, elevation of wellhead, depths to the top of well screens, thickness of free product (if present), screened interval of each well, and total depth of well. Water levels are to be recorded with level corrections made for all monitoring wells containing free product.
  - iv) Provide ground water elevations contour maps with ground water flow direction and calculated hydrologic gradient(s) clearly indicated on the figure(s).
  - v) Provide maps of the dissolved phase contaminants and free product indicating present conditions at the time of the specific sampling occurrence.
  - vi) Provide a plot plan which clearly illustrated the locations of monitoring wells, former/current underground storage tank system and product piping, and buildings located on site and immediately adjacent to the property lines of the site.
  - vii)Provide a detailed description of sample collection protocol (e.g., well purging, sample collection equipment, sample preservation and shipment procedures and decontamination procedures). Clearly describe any significant changes in sampling protocol or equipment between sampling events.
  - viii) Provide copies of laboratory data sheets, laboratory QA/QC information and chain-of-custody documents for the most recent round of ground water samples collected.
  - ix) Provide a narrative description of how purge water from ground water monitoring wells and/or soil cuttings are managed at the site. Provide

documentation (e.g., manifests/receipts) of proper disposal of contaminated well purge water and/or soil cuttings removed from the site.

- x) For each indicator compound specified in this order, the dischargers shall use appropriate statistical and/or graphical techniques to evaluate trends in concentrations from the ground water samples. The trend analysis shall be based on the ground water data acquired during the calendar year. Graphs utilized for this purpose shall be of an appropriate scale to clearly illustrate trends in ground water data. The dischargers, on an annual basis, shall conduct an evaluation of trends in contaminant concentrations from the ground water samples. The results of this analysis shall be reported to the RWQCB Executive Officer on an annual basis as an appendix to the final ground water monitoring report for the calendar year.
- xi) As applicable, report quantities of ground water removed and/or treated.
- b) Ground water samples shall be collected, analyzed and reported as follows, with the first quarterly monitoring report due **January 30, 2001**:

Sampling Period	Report Due
Jan., Feb., Mar.	April 30
Apr., May, Jun.	July 30
Jul., Aug., Sept.	October 30
Oct., Nov., Dec.	January 30

c) Each report must be reviewed and signed by an appropriately registered professional as required under Sections 6735, 7835, and 7835.1 of the California Business and Professions Code. The following statement must be included as part of the report:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

A letter of transmittal shall accompany each submitted report and should discuss any significant findings. You or a duly authorized representative of Budget Trade & Gas must sign the letter of transmittal.

### VII. PROHIBITIONS

a) The dischargers shall properly manage, treat, and/or dispose of contaminated soils and ground water in accordance with applicable federal, state and local regulations. Cleanup and Abatement Order No. 2000-255

- b) Neither the treatment nor the discharge of wastes shall create a condition of pollution or nuisance as defined in Section 13050, Division 7 of the CWC.
- c) The discharge of any low volume, non-hazardous wastes or waste constituents which are generated as a result of cleanup and abatement action at this site is prohibited unless the discharge is permitted under the National Pollutant Discharge Elimination System (NPDES) or by issuance of Waste Discharge Requirements (WDR) by the RWQCB under Section 13260 of the CWC.

#### VIII. FAILURE TO SUBMIT REPORTS

Failure to submit technical reports required under this cleanup and abatement order may result in the imposition of civil liabilities, under CWC Section 13350(d) in an amount not to exceed fifteen thousand dollars (\$15,000) for each day in which the violation occurs.

JOHN H. ROBERTUS
Executive Officer

Date issued:

November 7, 2000